REMARKS[1]

In the outstanding Office Action, the Examiner rejected claims 1-50, 52-60, and 62-69 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,061,793 to Tewfik et al. ("Tewfik"). By this amendment, Applicant has amended claims 1-21, 25, 50, 52-56, and 60. Claims 1-50, 52-60, and 62-69 remain pending in this application.

Applicant respectfully traverses the rejection of claims 1-50, 52-60, and 62-69 under 35 U.S.C. § 102(e) for at least the reason that Tewfik fails to anticipate claims 1-50, 52-60, and 62-69. Tewfik cannot anticipate claims 1-50, 52-60, and 62-69 because Tewfik fails to disclose at least "damping and shifting a predetermined number of orthogonal transform coefficients selected from the plurality of orthogonal transform coefficients by damping the predetermined number of orthogonal transform coefficients by a predetermined amount and shifting the predetermined number of orthogonal coefficients by a predetermined number of units in the direction of the frequency axis," as recited in amended independent claims 1, 25, 50, and 60, and required by dependent claims 2-24, 26-49, 52-59, and 62-69.

In the Office Action mailed December 15, 2005, the Examiner acknowledges that Tewfik fails to disclose this feature, stating "[Tewfik] does not specifically teaching damping and shifting the orthogonal transform coefficient . . . ." Office Action mailed December 15, 2005, page 5. In the outstanding Final Office Action, however, the Examiner apparently found new support for this limitation, asserting that this feature is

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[1]The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement of characterization in the Office Action.

disclosed in Tewfik, citing to col. 8, line 21 - col. 9, line 47 for support of this assertion.

The Examiner repeats this assertion in the Advisory Action mailed August 15, 2006,

briefly stating "Tewfik provides support for the damping and shifting limitations of the

claims." The Examiner then again asserts that Tewfik teaches "damping and shifting" in

the Advisory Action mailed September 21, 2006, stating "[t]he PN sequence is filtered

with the masking filter and the resulting masked watermark is scaled by a scale factor."

Advisory Action, page 2. Applicant continues to disagree with the Examiner's assertion,

and submits that Tewfik cannot anticipate claims 1, 25, 50, and 60 for at least the

following reasons.

Tewfik discloses:

> the resulting masked watermark is scaled by scale factor 44,
> and then in step 46 is scaled by the audio signal as each
> segment thereof has been weighted with a Hanning window
> in step 36 and as has then been extracted by an extract
> envelope in step 48. The resulting scaled masked water
> mark is in step 50 added to the audio signal . . . (col. 8, lines
> 59-64);

and

> [t]he time-domain weighting operation attenuates the energy
> of the computed watermark (col. 9, lines 1-2).

To the extent that Tewfik's disclosed "scal[ing]" operation can reasonably

correspond to Applicant's claimed "shifting," Tewfik does not disclose how the resulting

masked watermark is scaled, or what the scale factor is. See Tewfik, col. 8, lines 59-64.

Tewfik provides no disclosure of what direction, if any, the resulting masked watermark

is scaled in, and certainly does not disclose that the resulting masked watermark is

scaled in the direction of the frequency axis. Accordingly, even if the "scal[ing]"

operation could correspond to Applicant's claimed "shifting," Tewfik cannot provide the

necessary disclosure of "shifting . . . in the direction of the frequency axis," as recited in

claims 1, 25, 50, and 60 (emphasis added).

Moreover, even if Tewfik's disclosed masking and scaling could reasonably

correspond to Applicant's claimed "damping and shifting" as asserted by the Examiner,

Tewfik cannot anticipate amended independent claims 1, 25, 50, and 60, because

Tewfik fails to disclose "damping the predetermined number of orthogonal transform

coefficients by a predetermined amount and shifting the predetermined number of

orthogonal coefficients by a predetermined number of units in the direction of the

frequency axis," as recited in amended independent claims 1, 25, 50, and 60 (emphasis

added). Tewfik merely discloses:

> data inputted in step 10 is embedded within the host data as
> dictated by a perceptual mask. A perceptual masking model
> is used to determine the optimal locations within the host
> data to insert the hidden data or watermark . . . [t]he mask
> provides for the data inputted by step 10 to be embedded
> with the host data, at places typically imperceptible to the
> human ear (col. 3, lines 57-64);

and

> the resulting masked watermark is scaled by scale factor 44,
> and then in step 46 is scaled by the audio signal (col. 8, lines
> 59-60).

Tewfik, however, does not provide any disclosure that the perceptual mask masks the

data by a predetermined amount, or that the scaling scales the masked watermark by a

predetermined number of units.

Furthermore, Tewfik discloses that "[t]he maximum period of a PN-sequence is

2^m-1 . . .the period N autocorrelation function has peaks equal to 0, N, 2N, etc." Tewfik,

col. 3, lines 46-51 (emphasis added). Here, Tewfik merely discloses that a function

related to the period of a PN sequence has <u>peaks</u> equal to multiples of the period.

These values are unrelated to the masking and scaling operations of <u>Tewfik</u>, and thus

cannot be characterized as constituting "a predetermined amount," or "a predetermined

number of units," as recited in amended independent claims 1, 25, 50, and 60.

For at least the reasons above, Applicant submits that <u>Tewfik</u> fails to disclose

"damping the predetermined number of orthogonal transform coefficients <u>by a</u>

<u>predetermined amount</u> and shifting the predetermined number of orthogonal coefficients

<u>by a predetermined number of units</u> in the direction of the frequency axis," as recited in

amended independent claims 1, 25, 50, and 60 (emphasis added). Accordingly, the

rejection of these claims under 35 U.S.C. § 102(e) should be withdrawn.

Claims 2-24, 26-49, 52-59, and 62-69 depend from claims 1, 25, 50, and 60, and

thus require all of the features recited in claims 1, 25, 50, and 60. Because <u>Tewfik</u> fails

to disclose every feature recited in the independent claims, <u>Tewfik</u> also fails to disclose

every feature required by the dependent claims. Accordingly, Applicant respectfully

requests that the Examiner withdraw the rejection of claims 2-24, 26-49, 52-59, and

62-69 under 35 U.S.C. § 102(e).

Applicant traverses the rejection of claims 1-50, 52-60, and 62-69 under the

judicially created doctrine of obviousness-type double patenting, on the ground that

claims 1-50, 52-60, and 62-69 are not merely an obvious variation of claims 1-26 of

<u>Sato</u>.

Independent claims 1, 25, 50, and 60 recite a combination including at least

"damping and shifting a predetermined number of orthogonal transform coefficients

selected from the plurality of orthogonal transform coefficients by damping the

predetermined number of orthogonal transform coefficients by a predetermined amount and shifting the predetermined number of orthogonal coefficients by a predetermined number of units in the direction of the frequency axis." Sato does not recite at least this feature, and at page 3 of the Office Action, the Examiner acknowledges that Sato "does not specifically claim damping and shifting." To attempt to cure the deficiency of Sato, the Examiner cites Tewfik. Office Action, page 3. As discussed above, however, Tewfik fails to teach or suggest at least "damping the predetermined number of orthogonal transform coefficients by a predetermined amount and shifting the predetermined number of orthogonal coefficients by a predetermined number of units in the direction of the frequency axis," as recited in independent claims 1, 25, 50, and 60, and required by dependent claims 2-24, 26-49, 52-59, and 62-69. Tewfik thus cannot be relied upon for curing the noted deficiency of Sato.

Because Sato does not recite or suggest at least this feature, and Tewfik also does not disclose this feature, claims 1, 25, 50, and 60, and all claims that depend therefrom, are not obvious variants of claims 1-26 of Sato. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of claims 1-50, 52-60, and 62-69 on the ground of nonstatutory obviousness-type double patenting.
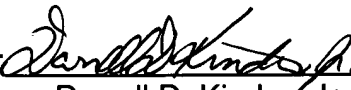
In view of the foregoing remarks, Applicant submits that this claimed invention is neither anticipated nor rendered obvious in view of the prior art references cited by the Examiner. Applicant therefore requests the Examiner's reconsideration of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge

any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: October 23, 2006   By:

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Reg. No. 57,460